Claims

What is Claimed is:

1. An aqueous cathodic electrodeposition coating agent comprising a resin solids composition and containing 0.1 wt-% to 5 wt-%, based on the resin solids composition, of an additive consisting essentially of at least one acidic polymer having an acid value of 20 to 100 mg KOH/g and a content of lateral and/or terminal aliphatic C5-C14-hydrocarbon radicals of 40 wt-% to 80 wt-%.

2. The cathodic electrodeposition coating agent of claim 1, wherein the hydrocarbon radicals are aliphatic C6-C12 hydrocarbon radicals.

3. The cathodic electrodeposition coating agent of claim 1, wherein the acid value of the at least one acidic polymer is 35 to 50 mg KOH/g.

4. The cathodic electrodeposition coating agent of claim 1, wherein the content of the hydrocarbon radicals in the at least one acidic polymer is 60 wt-% to 70 wt-%.

5. The cathodic electrodeposition coating agent of claim 1, wherein the hydrocarbon radicals are cyclic, linear and/or branched aliphatic hydrocarbon radicals.

6. The cathodic electrodeposition coating agent of claim 1, wherein the at least one acidic polymer has a number average molecular mass of 800 to 3000.

7. The cathodic electrodeposition coating agent of claim 1, wherein the at least one acidic polymer is selected from the group consisting of (meth)acrylic copolymers, polyurethanes, polyesters and hybrid polymers derived therefrom.

8. The cathodic electrodeposition coating agent of claim 1, wherein the at least one acidic polymer is an acidic polyester.

9. The cathodic electrodeposition coating agent of claim 8, wherein the acidic polyester has a calculated molecular mass of 800 to 2000.

10. A process for cathodic electrodeposition coating of electrically conductive substrates using the cathodic electrodeposition coating agent of claim 1.